February 19, 2003

Re: Irving Materials, Inc. 081-16254-00054
TO: Interested Parties / Applicant

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

#### **Notice of Decision: Approval - Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within (18) eighteen days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure



### Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

### NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Construction Permit

for **Irving Materials**, **Inc.** in Johnson County

CP No.: 081-16254, Plt ID 081-00054

Notice is hereby given that the above-mentioned company, located at Smith Valley Road, Greenwood, Indiana 46143, has made application to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a permit to construct and operate a wet process sand and gravel plant. Based on 8,760 hours of operation per year, the potential to emit of PM and PM10 is 76.5 tons per year and 36.4 tons per year, respectively.

Notice is hereby given that there will be a period of thirty (30) days from the date of publication of this notice during which any interested person may comment on why this proposed permit revision should or should not be issued. Appropriate comments should be related to any air quality issues, interpretation of the state and federal rules, calculations made, technical issues, or the effect that the operation of this source would have on any aggrieved individuals. IDEM, OAQ does not have jurisdiction in specifying and implementing requirements for zoning, odor or noise. For such issues, please contact your local officials.

A copy of the application and draft permit is available for examination at the White River Public Library, 1664 Library Boulevard, Greenwood, Indiana 46142. A copy of the draft permit is also available for examination at http://www.IN.gov/idem/air/permits. All statements, along with supporting documentation, should be submitted in writing to the IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015. If adverse comments concerning the <u>air pollution impact</u> of this draft permit revision are received, together with a request for a public hearing, such a hearing may be held to give further consideration to this application.

Persons not wishing to comment at this time, but wishing to receive notice of future proceedings conducted related to this action, must submit a written request to the OAQ, at the above address. All interested parties of record will receive a notice of the decision on this matter and will then have fifteen (15) days after receipt of the Notice of Decision to file a petition for administrative review. Procedures for filing such a petition will be enclosed with the Notice.

Irving Materials, Inc.

Greenwood, Indiana

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Permit Reviewer: ERG/AAB

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Amanda Baynham, ERG, 1600 Perimeter Park Drive, Suite 200, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Original Signed by Paul Dubenetzky Paul Dubenetzky, Chief Permits Branch Office of Air Quality

**ERG/AAB** 



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# NEW SOURCE CONSTRUCTION PERMIT and SOURCE SPECIFIC OPERATING AGREEMENT (SSOA) OFFICE OF AIR QUALITY

# Irving Materials, Inc. Smith Valley Road Greenwood, Indiana 46143

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: S 081-16254-00054	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 19, 2003

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Permit Reviewer: ERG/AAB

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#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary sand and gravel plant.

Authorized Individual: Director of Regulatory Compliance

Source Address: Smith Valley Road, Greenwood, Indiana 46143

Mailing Address: 2321 E - 150N, Bluffton, Indiana 46714

General Source Phone: 260-824-3428

SIC Code: 1442 County Location: Johnson

Source Location Status: Attainment for all criteria pollutants
Source Status: Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

#### A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

One (1) sand and gravel processing plant, constructed in 2003, used to process a maximum of 500 tons of sand and gravel per hour, using a wet processing method, which controls emissions of particulate matter. The plant consists of the following emission units:

- (a) One (1) Syntron feeder, identified as E-1, having a maximum throughput capacity of 530 tons per hour.
- (b) One (1) Syntron feeder, identified as E-2, having a maximum throughput capacity of 450 tons per hour.
- (c) One (1) wet scalping screen, identified as Station No.1, having a maximum throughput capacity of 530 tons per hour.
- (d) Two (2) wet screen decks, identified as Station No.3 and No.4, each having a maximum throughput capacity of 300 tons per hour.
- (e) One (1) classifier, identified as E-3, having a maximum throughput capacity of 300 tons per hour.
- (f) One (1) log washer, identified as E-4, having a maximum throughput capacity of 300 tons per hour.
- (g) Three screw conveyors, identified as E-5, E-6, and E-7, each having a maximum capacity of 100 tons per hour.
- (h) One (1) gyrosphere crusher, identified as E-8, having a maximum throughput capacity of 50 tons per hour.

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(i) Sand and gravel storage piles having a combined maximum storage capacity of 100,000 tons.

- (j) Truck loading and unloading operations.
- (k) Paved and unpaved roads and parking lots.

#### A.3 SSOA Applicability [326 IAC 2-9-1]

This stationary source, otherwise required to have a Minor Source Operating Permit as described in 326 IAC 2-6.1-2, has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Source Specific Operating Agreement (SSOA) pursuant to 326 IAC 2-9-7 (Sand and Gravel Plants).

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#### SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

#### B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

#### B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

#### B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

#### B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Source Specific Operating Agreement Program, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

#### B.6 Source Specific Operating Agreement Program [326 IAC 2-9]

This document shall also become a Source Specific Operating Agreement pursuant to 326 IAC 2-9-1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section verifying that the facilities covered in this Construction Permit were constructed as proposed in the application. The facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operating agreement will be subject to annual operating permit fees pursuant to 326 IAC 2-9-7 (Sand and Gravel Plants).

#### B.7 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.670, Subpart OOO, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

(a) Commencement of construction date (no later than 30 days after such date);

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- (b) Actual start-up date (within 15 days after such date); and
- (c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

#### B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions: and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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#### B.9 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

#### B.10 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.11 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

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Permit Reviewer: ERG/AAB

#### B.12

Annual Fee Payment [326 IAC 2-1.1-7]
(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-(b) 4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

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Irving Materials, Inc. Greenwood, Indiana Permit Reviewer: ERG/AAB

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]
  - (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
  - (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Fugitive Dust Emissions [326 IAC 6-4] [326 IAC 2-9-7(b)(4)(G)]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions) and 326 IAC 2-9-7(b)(4)(E).

#### C.5 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on October 23, 2002. The plan consists of using wet suppression of dust on unpaved roadways and storage piles.

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Irving Materials, Inc. Greenwood, Indiana Permit Reviewer: ERG/AAB

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the applicable emission control procedures in 326 IAC
  14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements
  are applicable for any removal or disturbance of RACM greater than three (3) linear feet
  on pipes or three (3) square feet on any other facility components or a total of at least
  0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61,
  Subpart M, is federally enforceable.

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Irving Materials, Inc. Greenwood, Indiana Permit Reviewer: ERG/AAB

#### **Testing Requirements**

#### C.7 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

#### **Compliance Monitoring Requirements**

#### C.9 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### C.10 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

#### C.11 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
permit, the Permittee shall take appropriate response actions. The Permittee shall
submit a description of these response actions to IDEM, OAQ, within thirty (30) days of
receipt of the test results. The Permittee shall take appropriate action to minimize

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excess emissions from the affected emissions unit while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **Record Keeping and Reporting Requirements**

#### C.12 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

#### C.13 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

#### C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

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> Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

#### C.15 Annual Notice [326 IAC 2-9-7]

(a) The source shall provide an annual notice to the commissioner stating that the source is in operation and certifying that its operations are in compliance with this Source Specific Operating Agreement. This report shall be submitted to:

Compliance Branch
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than January 30 of each year using the attached form.
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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#### **SECTION D.1**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)]

One (1) sand and gravel processing plant, constructed in 2003, used to process a maximum of 500 tons of sand and gravel per hour, using a wet processing method, which controls emissions of particulate matter. The plant consists of the following emission units:

- (a) One (1) Syntron feeder, identified as E-1, having a maximum throughput capacity of 530 tons per hour.
- (b) One (1) Syntron feeder, identified as E-2, having a maximum throughput capacity of 450 tons per hour.
- (c) One (1) wet scalping screen, identified as Station No.1, having a maximum throughput capacity of 530 tons per hour.
- (d) Two (2) wet screen decks, identified as Station No.3 and No.4, each having a maximum throughput capacity of 300 tons per hour.
- (e) One (1) classifier, identified as E-3, having a maximum throughput capacity of 300 tons per hour.
- (f) One (1) log washer, identified as E-4, having a maximum throughput capacity of 300 tons per hour.
- (g) Three screw conveyors, identified as E-5, E-6, and E-7, each having a maximum capacity of 100 tons per hour.
- (h) One (1) gyrosphere crusher, identified as E-8, having a maximum throughput capacity of 50 tons per hour.
- (i) Sand and gravel storage piles having a combined maximum storage capacity of 100,000 tons.
- (j) Truck loading and unloading operations.
- (k) Paved and unpaved roads and parking lots.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### D.1.1 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the sand and gravel plant, except when otherwise specified in 40 CFR 60, Subpart OOO.

D.1.2 Standards of Performance for Nonmetallic Mineral Processing Plants [326 IAC 12-1] [40 CFR 60, Subpart A]

Pursuant to 326 IAC 60, Subpart OOO, the Permittee shall comply with the following requirements:

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- (a) On and after the sixtieth (60) day after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility, any fugitive emissions which exhibit greater than ten percent (10%) opacity.
- (b) On and after the sixtieth day after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than fifteen percent (15%) opacity.
- (c) On and after the sixtieth (60) day after achieving the maximum production rate at which the affected facility will be operated, but not more than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:
  - (1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the process line up to the next crusher.
  - (2) Screening operations, bucket elevators, and belt conveyors in the production in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher in the production line.
- D.1.3 Source Specific Operating Agreement For Sand and Gravel Plants [326 IAC 2-9-7]

  Pursuant to 326 IAC 2-9-7(b)(2), the facilities and processes of this source shall comply with the following requirements of the Source Specific Operating Agreement for Sand and Gravel Plants:
  - (a) The annual throughput of the sand and gravel plant shall be not exceed one million (1,000,000) tons per year.
  - (b) The particulate matter emissions, excluding fugitive particulate matter emissions, shall not exceed twenty-five (25) tons per year.
  - (c) The sand and gravel operation shall use no more than nine (9) crushers, twenty (20) screens, and a conveying operation.
  - (d) A wet process or continuous wet suppressions shall be used to control particulate matter emissions.
  - (e) All manufacturing equipment that generates particulate emissions and control devices shall be operated and maintained at all times of plant operation in such a manner as to meet the requirements of this rule.
  - (f) Visible emissions from the screening and conveying operations shall not exceed an average of ten percent (10%) opacity in twenty-four (24) consecutive readings in six (6) minute period, and visible emissions form the crushing operation shall not exceed an average of fifteen percent (15%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. Compliance with these limitations shall be determined by 40 CFR 60, Appendix A, Method 9.
  - (g) Fugitive particulate emissions shall be controlled by applying water on storage piles and unpaved roadways on an as needed basis, such that the following visible emission conditions are met:

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- (1) Visible emissions from storage piles shall not exceed twenty percent (20%) in twenty-four (24) consecutive readings in a six (6) minute period. This limitation shall not apply during periods when application of control measures are ineffective or unreasonable due to sustained high wind speeds. The opacity shall be determined using 40 CFR60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but not more than on-fourth (1/4) mile, from the plume and at approximately right angles to the plume.
- (2) Visible emissions from unpaved roadways shall not exceed an average instantaneous opacity of twenty percent (20%). Average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for vehicle pass shall be taken as follows:
  - (A) The first shall be taken at the time of emission generation.
  - (B) The second shall be taken five (5) seconds after the first.
  - (C) The third shall be taken five (5) seconds after the second or ten (10) seconds after the first.

The three (3) readings shall be taken at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but not more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume.

(h) Fugitive particulate emissions at the sand and gravel plant shall not escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located pursuant to 326 IAC 6-4.

#### D.1.4 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sand and gravel processing facility shall not exceed 69.0 pounds per hour when operating at a process weight rate of 500 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$
 where  $E =$ rate of emission in pounds per hour; and  $P =$ process weight rate in tons per hour

#### **Compliance Determination Requirements**

#### D.1.5 Performance Tests [40 CFR 60, Subpart OOO]]

Pursuant to 40 CFR 60.675, the Permittee shall determine compliance with the opacity limitations in Conditions D.1.2(a) and (b) as follows:

- (a) The Permittee shall use 40 CFR 60, Appendix A, Method 9, with the following additions:
  - (1) The minimum distance between the observer and the emission source shall be 15 feet.

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- (2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust).
- (b) When determining compliance with the fugitive emissions standard in Condition D.1.2(a), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) if the following conditions apply:
  - (1) There are no individual readings greater than ten percent (10%) opacity; and
  - There are no more than three (3) readings of ten percent (10%) opacity for the 1-hour period.
- (c) When determining compliance with the fugitive emission standard in Condition D.1.2(b), the duration of Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1-hour (ten 6-minute averages) if the following conditions apply:
  - (1) There are no individual readings greater than fifteen percent (15%) opacity; and
  - (2) There are no more than 3 readings of fifteen percent (15%) for the 1-hour period.
- (d) The initial Method 9 performance tests are not required for:
  - (1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher.
  - (2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher in the production line.

#### Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

D.1.6 Record Keeping Requirements [326 IAC 2-9-7(b)(4)(B)]

Pursuant to 326 IAC 2-9-7(b)(4)(B), the source shall maintain annual throughput records of the sand and gravel processed at the site on a calendar year basis. These records shall be maintained for a minimum period of five (5) years, and shall be made available, upon request, to IDEM, OAQ personnel.

#### D.1.7 Reporting Requirements [326 IAC 2-9]

(a) The Permittee shall submit an annual notice to the commissioner stating that the source is in operation and certifying that its operations are in compliance with the requirements of this Source Specific Operating Agreement. This report shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

The report shall be submitted not later than January 30 of each year.

(b) Any exceedance of a requirement contained in this Source Specific Operating Agreement shall be reported, in writing, within one (1) week of its occurrence.

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#### D.1.8 Reporting Requirements [40 CFR 60, Subpart OOO]

Pursuant to 40 CFR 60.476, the Permittee shall comply with the following reporting requirements:

- (a) The Permittee shall submit written reposts of the results of all performance tests conducted to demonstrate compliance with the standards in Condition D.1.2.
- (b) If facilities that processes saturated material are subsequently used to process unsaturated materials, the Permittee shall submit a report of this change not more than 30 days after the date on which the change was made.
- (c) If facilities that processes unsaturated material are subsequently used to process saturated materials, the Permittee shall submit a report of this change not more than 30 days after the date on which the change was made.
- (d) The Permittee shall submit a notification of the actual date of initial startup of each affected facility to the Administrator.

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## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

### MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification and certification requirements under 326 IAC 2-9.

Company Name:	Irving Materials, Inc.
Address:	Smith Valley Road
City:	Greenwood, Indiana 46163
Phone #:	(260) 824-3428
SSOA #:	081-16254-00054

I hereby certify that Irving Materials, Inc., is still in operation and is in compliance with the requirements of Source Specific Operating Agreement (SSOA) 081-16254-00054.

Authorized Individual (typed):	
Title:	
Signature:	
Date:	

Irving Materials, Inc. Greenwood, Indiana Permit Reviewer: ERG/AAB

#### MALFUNCTION REPORT

### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4. THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER? \_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE? \_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES? \_\_\_\_\_, 25 TONS/YEAR VOC? \_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE? \_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR? \_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS? \_\_\_\_\_, 25 TONS/YEAR FLUORIDES? \_\_\_\_\_\_, 100TONS/YEAR CARBON MONOXIDE? \_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT? \_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT? \_\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD? \_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2)? \_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # AND/OR PERMIT LIMIT OF \_\_\_\_ THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE? Y THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT? Y N COMPANY: PHONE NO. ( ) LOCATION: (CITY AND COUNTY)\_ LOCATION: (CITY AND COUNTY)\_
PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_ AFS POINT ID: \_\_\_\_ INSP:\_\_ CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: DATE/TIME MALFUNCTION STARTED: \_\_\_\_/ \_\_\_/ 19\_\_\_\_ AM / PM ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE\_\_\_\_/\_\_\_/ 19\_\_\_\_\_ AM/PM TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:\_\_\_\_\_ ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: MEASURES TAKEN TO MINIMIZE EMISSIONS: REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS: CONTINUED OPERATION REQUIRED TO PROVIDE **ESSENTIAL\*** SERVICES: CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: INTERIM CONTROL MEASURES: (IF APPLICABLE) MALFUNCTION REPORTED BY:\_\_\_\_\_ (SIGNATURE IF FAXED) MALFUNCTION RECORDED BY:\_\_\_\_\_\_DATE:\_\_\_\_\_TIME:\_\_\_\_\_

\*SEE PAGE 2

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# Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

#### 326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

#### 326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

\*Essential services are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

### Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a New Source Construction and Source Specific Operating Agreement (SSOA)

#### **Source Background and Description**

Source Name: Irving Materials, Inc.

Source Location: Smith Valley Road, Greenwood, Indiana 46143

County: Johnson SIC Code: 1442

Operation Permit No.: 081-16254-00054

Permit Reviewer: ERG/AAB

The Office of Air Quality (OAQ) has reviewed an application from Irving Materials, Inc. relating to the construction and operation of a sand and gravel plant.

#### **Permitted Emission Units and Pollution Control Equipment**

There are no permitted facilities operating at this source during this review process.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### New Emission Units and Pollution Control Equipment Receiving Prior Approval

The source plans to construct the following emission units and pollution control devices:

One (1) sand and gravel processing plant, constructed in 2003, used to process a maximum of 500 tons of sand and gravel per hour, using a wet processing method, which controls emissions of particulate matter. The plant consists of the following emission units:

- (a) One (1) Syntron feeder, identified as E-1, having a maximum throughput capacity of 530 tons per hour.
- (b) One (1) Syntron feeder, identified as E-2, having a maximum throughput capacity of 450 tons per hour.
- (c) One (1) wet scalping screen, identified as Station No.1, having a maximum throughput capacity of 530 tons per hour.
- (d) Two (2) wet screen decks, identified as Station No.3 and No.4, each having a maximum throughput capacity of 300 tons per hour.
- (e) One (1) classifier, identified as E-3, having a maximum throughput capacity of 300 tons per hour.

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(f) One (1) log washer, identified as E-4, having a maximum throughput capacity of 300 tons per hour.

- (g) Three screw conveyors, identified as E-5, E-6, and E-7, each having a maximum capacity of 100 tons per hour.
- (h) One (1) gyrosphere crusher, identified as E-8, having a maximum throughput capacity of 50 tons per hour.
- (i) Sand and gravel storage piles having a combined maximum storage capacity of 100,000 tons.
- (j) Truck loading and unloading operations.
- (k) Paved and unpaved roads and parking lots.

#### **Existing Approvals**

No previous approvals have been issued to this source.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Stack Summary**

There are no stacks associated with the emission units that comprise this source.

#### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 23, 2002, with additional information received on December 10, 2002.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 5).

#### **Potential To Emit of Source Before Controls**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

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Pollutant	Potential To Emit (tons/year)
PM	76.5
PM-10	36.4
SO <sub>2</sub>	0
VOC	0
CO	0
NO <sub>x</sub>	0

Note: There are no HAP emissions produced by this source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10 are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM10 are greater than 25 tons per year, therefore, the source would be subject to the provisions of 326 IAC 2-6.1. However, the source concurrently applied for a Source Specific Operating Agreement (SSOA) under Option 2 of 326 IAC 2-9-7(b).
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year, therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (e) Fugitive Emissions
  Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **County Attainment Status**

The source is located in Johnson County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Attainment
$NO_2$	Attainment
Ozone	Attainment
СО	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Johnson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Johnson County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
  Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate

Irving Materials, Inc.

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matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **Source Status**

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	76.5
PM10	36.4
SO <sub>2</sub>	
VOC	
CO	
NO <sub>x</sub>	
Single HAP	
Combination HAPs	

(a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### **Part 70 Permit Determination**

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year.
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

#### **Federal Rule Applicability**

(a) This new sand and gravel plant is subject to the requirements of the New Source Performance Standard (NSPS) 40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants, because the source will be used to process a nonmetallic mineral as defined in 40 CFR 60.671, will be capable of processing more than 25 tons of mineral per hour, and will be constructed after the August 31, 1983 applicability date.

Pursuant to 326 IAC 60, Subpart OOO, the Permittee shall comply with the following requirements:

- (1) On and after the sixtieth (60) day after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility, any fugitive emissions which exhibit greater than ten percent (10%) opacity.
- On and after the sixtieth day after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial

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startup, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than fifteen percent (15%) opacity.

- (3) On and after the sixtieth (60) day after achieving the maximum production rate at which the affected facility will be operated, but not more than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:
  - (A) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the process line up to the next crusher.
  - (B) Screening operations, bucket elevators, and belt conveyors in the production in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher in the production line.
- (4) Pursuant to 40 CFR 60.675, the Permittee shall determine compliance with the opacity limitations in Paragraphs (a)(1) and (a)(2) as follows:
  - (A) The Permittee shall use 40 CFR 60, Appendix A, Method 9, with the following additions:
    - (i) The minimum distance between the observer and the emission source shall be 15 feet.
    - (ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust).
  - (B) When determining compliance with the fugitive emissions standard in Paragraph (a)(1), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) if the following conditions apply:
    - (i) There are no individual readings greater than ten percent (10%) opacity; and
    - (ii) There are no more than three (3) readings of ten percent (10%) opacity for the 1-hour period.
  - (C) When determining compliance with the fugitive emission standard in Paragraph (a)(2), the duration of Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1-hour (ten 6-minute averages) if the following conditions apply:
    - (i) There are no individual readings greater than fifteen percent (15%) opacity; and
    - (ii) There are no more than 3 readings of fifteen percent (15%) for the 1-hour period.
  - (D) The initial Method 9 performance tests are not required for:
    - (i) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process

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- saturated material in the production line up to, but not including the next crusher.
- (ii) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher in the production line.
- (E) Pursuant to 40 CFR 60.476, the Permittee shall comply with the following reporting requirements:
  - (i) The Permittee shall submit written reposts of the results of all performance tests conducted to demonstrate compliance with the standards in Paragraph (a)(1) and (a)(2).
  - (ii) If facilities that processes saturated material are subsequently used to process unsaturated materials, the Permittee shall submit a report of this change not more than 30 days after the date on which the change was made.
  - (iii) If facilities that processes unsaturated material are subsequently used to process saturated materials, the Permittee shall submit a report of this change not more than 30 days after the date on which the change was made.
  - (iv) The Permittee shall submit a notification of the actual date of initial startup of each affected facility to the Administrator.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

#### State Rule Applicability - Entire Source

#### 326 IAC 2-6 (Emission Reporting)

This source is located in Johnson County and the potential to emit CO, VOC, NOx, PM10 and SO2 are less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 2-9-7 (Source Specific Operating Agreement for Sand and Gravel Plants)

The facilities and processes of this source shall be granted the Source Specific Operating Agreement pursuant to 326 IAC 2-9-7(b)(3). The source shall comply with the following requirements:

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- (a) The annual throughput of the sand and gravel plant shall not exceed one million (1,000,000) tons per year.
- (b) The particulate matter emissions, excluding fugitive particulate matter emissions, shall not exceed twenty-five (25) tons per year.
- (c) The sand and gravel operation shall use no more than nine (9) crushers, twenty (20) screens, and a conveying operation.
- (d) A wet process or continuous wet suppressions shall be used to control particulate matter emissions.
- (e) All manufacturing equipment that generates particulate emissions and control devices (if any) shall be operated and maintained at all times of plant operation in such a manner as to meet the requirements of this rule.
- (f) Visible emissions from the screening and conveying operations shall not exceed an average of ten percent (10%) opacity in twenty-four (24) consecutive readings in six (6) minute period, and visible emissions form the crushing operation shall not exceed an average of fifteen percent (15%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. Compliance with these limitations shall be determined by 40 CFR 60, Appendix A, Method 9.
- (g) Fugitive particulate emissions shall be controlled by applying water on storage piles and unpaved roadways on an as needed basis, such that the following visible emission conditions are met:
  - (1) Visible emissions from storage piles shall not exceed twenty percent (20%) in twenty-four (24) consecutive readings in a six (6) minute period. This limitation shall not apply during periods when application of control measures are ineffective or unreasonable due to sustained high wind speeds. The opacity shall be determined using 40 CFR60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but not more than on-fourth (1/4) mile, from the plume and at approximately right angles to the plume.
  - (2) Visible emissions from unpaved roadways shall not exceed an average instantaneous opacity of twenty percent (20%). Average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for vehicle pass shall be taken as follows:
    - (A) The first shall be taken at the time of emission generation.
    - (B) The second shall be taken five (5) seconds after the first.
    - (C) The third shall be taken five (5) seconds after the second or ten (10) seconds after the first.

The three (3) readings shall be taken at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand at least fifteen (15) feet, but not more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume.

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(h) Fugitive particulate emissions at the sand and gravel plant shall not escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located pursuant to 326 IAC 6-4.

- The source shall maintain annual throughput records at the site on a calendar year (i) basis.
- The source shall provide an annual notice to the commissioner stating that the source is (j) in operation and certifying that its operations are in compliance with the requirements of this Source Specific Operating Agreement. This report shall be submitted to:

Compliance Data Section Office of Air Quality 100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

The report shall be submitted not later than January 30 of each year.

(k) Any exceedance of a requirement contained in this Source Specific Operating Agreement shall be reported, in writing, within one (1) week of its occurrence.

#### 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sand and gravel processing facility shall not exceed 69.0 pounds per hour when operating at a process weight rate of 500 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$
 where  $E =$ rate of emission in pounds per hour; and  $P =$ process weight rate in tons per hour

The source will use water to ensure compliance with this limitation.

#### 326 IAC 6-5 (Fugitive Particulate Matter Emissions Limitations)

This source is subject to the requirements of 326 IAC 6-5 because it will be constructed after December 13, 1985 and has the potential to emit fugitive particulate emissions from stockpiles, loading/unloading activities, and unpaved roadways. The source submitted a control plan for fugitive particulate matter emissions on October 23, 2002. This plan includes requirements to use water suppression on stockpiles and unpaved roadways

#### 326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to the requirements of 326 IAC 6-4 because the source has the potential to generate fugitive dust emissions from its stockpiles and unpaved roadways. This rule prohibits the source from allowing fugitive particulate emissions to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

#### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this sand and gravel plant will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

None of the emission units located at this plant will have potential VOC emissions equal to or greater than twenty five (25) tons per year; therefore, this source is not subject to the provisions of 326 IAC 8-1-6.

#### Conclusion

The construction and operation of this sand and gravel plant shall be subject to the conditions of the attached New Source Construction Permit and SSOA 081-16254-00054.

#### Appendix A: Emission Calculations Sand and Gravel Processing Crushing, Screening, and Conveying

Company Name: Irving Materials, Inc.

Address City IN Zip: Smith Valley Road, Greenwood, Indiana 46143

CP: 081-16254
Plt ID: 081-00054
Reviewer: ERG/AAB
Date: 12/11/02

Facility/Operation	Maximum Throughput Capacity (tons/hour)	PM Emission Factor (lb/ton)**	PM₁₀ Emission Factor (lb/ton)	PM Emissions (tons/year)	PM <sub>10</sub> Emissions (tons/year)
Crushing	50	0.00504	0.0024	1.10	0.53
Screening	500	0.0315	0.015	68.99	32.85
Conveyor Transfer	500	0.00294	0.0014	6.44	3.07
PTE Before Control				76.53	36.44
PTE After Control*				22.9	10.9

#### Methodology:

PTE (tons/yr) = Max. Throughput (tons/hr) \* Emission Factor (lb/ton) \* 8760 hours/year \* 1 ton/2000lbs. Emission Factors are from AP-42, Chapter 11.19.2 (Fifth Edition, 1/95).

<sup>\* -</sup> Assumes a worst-case control efficiency of 70% for processes using water. Actual control efficiency for this type of process varies from 70 to 95%. See AP-42, Chapter 11.19.1(Fifth Edition, 1/95).

<sup>\*\*-</sup> PM emissions are estimated to be 2.1 times the PM10 emissions (see footnote c on Table 11.19.2-2).

# Appendix A: Emission Calculations Sand and Gravel Processing Fugitive Emissions from Loading and Unloading Operations

Company Name: Irving Materials, Inc.

Address City IN Zip: Smith Valley Road, Greenwood, Indiana 46143

CP: 081-16254
Plt ID: 081-00054
Reviewer: ERG/AAB
Date: 12/11/02

	Maximum	PM	PM <sub>10</sub>		
	Throughput	Emission	<b>Emission</b>	PM	PM <sub>10</sub>
	Capacity	Factor	Factor	<b>Emissions</b>	<b>Emissions</b>
Facility/Operation	(tons/hour)	(lb/ton)	(lb/ton)	(tons/year)	(tons/year)
Loading/Unloading	500	0.0033	0.0016	7.23	3.50

#### Methodology:

PTE (tons/yr) = Max. Throughput (tons/hr) \* Emission Factor (lb/ton) \* 8760 hours/year \* 1 ton/2000lbs. Emission Factors are from AP-42, Chapter 11.19.2, Table 11.19.2-2 (Fifth Edition, 1/95).

# Appendix A: Emission Calculations Sand and Gravel Processing Fugitive Emissions from Unpaved Roads

Company Name: Irving Materials, Inc.

Address City IN Zip: Smith Valley Road, Greenwood, Indiana 46143

CP: 081-16254 Plt ID: 081-00054 Reviewer: ERG/AAB Date: 12/11/02

	PM-10	PM
k (lbs/vmt) =	2.6	10
a =	0.8	0.8
b =	0.4	0.5
C =	0.3	0.4
s =	4.800	4.800
M =	5.000	5.000
W =	100	100
E =	1.9337	7.6544
Miles traveled per year =	17520	17520
Emissions (tons/year) =	16.939	67.053

#### Methodology

Equation:  $E = \frac{k (s/12)^{a} (W/3)^{b}}{(M/0.2)^{c}}$ 

where:

E = particulate emission factor (lb/vmt)

k = base emission factor for particle size range and units of interest (lb/vmt)

s = road surface silt content (%)

W = average weight (tons) of the vehicles traveling the road

M = surface material moisture content (%)

Equation is from AP-42, Chapter 13.2.2 (Unpaved Roads)

### Appendix A: Emission Calculations Fugitive Emissions From Storage Piles

Company Name: Irving Materials, Inc.

Address City IN Zip: Smith Valley Road, Greenwood, Indiana 46143

CP: 081-16254
Plt ID: 081-00054
Reviewer: ERG/AAB
Date: 12/11/02

Ef =  $\frac{1.7*(s/1.5)*(365-p)}{235*(f/15)}$ 

where:

s = 2 % silt

p = 125 days of rain greater than or equal to 0.01 inches

f = 15 % of wind greater than or equal to 12 mph

Ef = 2.31 lb/acre/day

Ep (storage) =

Ef\*sc\*(20cuft/ton)\*(365 day/yr)

(2000 lb/ton)\*(43560 sqft/acre)\*(25 ft)

sc = 100,000 tons storage capacity for aggregateravel

Ep = 0.78 tons/yr for PM

PM-10 = 35% of PM:

Ep = 0.2716 tons/yr PM-10

# Appendix A: Emission Calculations Sand and Gravel Processing Summary

Company Name: Irving Materials, Inc.

Address City IN Zip: Smith Valley Road, Greenwood, Indiana 46143

CP: 081-16254 Plt ID: 081-00054 Reviewer: ERG/AAB Date: 12/11/02

Non-Fugitive Emissions

Facility/Operation	PM	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>2</sub>	VOC	CO	HAPs
Crushing	1.1	0.53	0	0	0	0	0
Screening	68.99	32.85	0	0	0	0	0
Conveyor Transfer	6.44	3.07	0	0	0	0	0
Totals	76.53	36.44	0	0	0	0	0

**Fugitive Emissions** 

Facility/Operation	PM	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>2</sub>	VOC	CO	HAPs
Storage	0.78	0.27	0	0	0	0	0
Transporting	67.05	16.94	0	0	0	0	0
Loading/Unloading	7.23	3.5	0	0	0	0	0
Totals	75.06	20.71	0	0	0	0	0